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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,896	06/24/2003	Jeffrey Allen Neilsen	100201650-1	4887
7:	590 11/03/2006		EXAM	INER
HEWLETT-PACKARD COMPANY			TENTONI, LEO B	
Intellectual Pro	perty Administration		ART UNIT	PAPER NUMBER
P.O. Box 272400			ARTONII	PAPER NOMBER
Fort Collins, C	O 80527-2400		1732	

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)		
		10/603,896	NEILSEN ET AL.		
	Office Action Summary	Examiner	Art Unit		
		Leo B. Tentoni	1732		
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the	correspondence address		
WHI( - Exte after - If NO - Failu Any	CHEVER IS LONGER, FROM THE MAILING DATES IN THE MAI	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be tiwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE.	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).		
Status	·				
1)⊠	Responsive to communication(s) filed on 29 Au	<u>ugust 2006</u> .			
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.				
3)[	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.		
Disposit	ion of Claims				
5)□ 6)⊠	Claim(s) 1-47 is/are pending in the application. 4a) Of the above claim(s) 20-47 is/are withdraw Claim(s) is/are allowed. Claim(s) 1-19 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.			
Applicat	ion Papers				
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) accelerate accelerate any not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	epted or b) objected to by the drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).		
Priority ι	under 35 U.S.C. § 119				
а)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureau  See the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No ed in this National Stage		
2) D Notic 3) D Infor	te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) or No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate		

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### DETAILED ACTION

1. The finality of the previous Office Action (mailed on 14 March 2006) is withdrawn in favor of the new grounds of rejection set forth below.

## Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 6 (last line), the expression "near a surface of the object" renders the claims indefinite principally because it is not clear what applicant intends to claim by such a recitation (e.g., it is not clear what the distance or range of distance from the object surface the colorant is kept).

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the

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differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

  Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jang et al (U.S. Patent 6,401,002 B1) in combination with either Shields et al (Shields I, U.S. Patent 5,181,045 A) or Shields et al (Shields II, U.S. Patent 5,428,383 A).

Jang et al (see the entire document, in particular, col. 5, lines 45-54; col. 7, lines 30-40; col. 8, lines 27-39) teaches a solid freeform fabrication process of making an object including ejecting a material to form a layer of an object wherein the

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layer contains a colorant, except that Jang et al do not explicitly teach causing a reaction that keeps a colorant near a surface of an object, which is taught by Shields I (see the entire document, in particular, col. 2, lines 1-11; col. 2, line 26 to col. 3, line 44) and Shields II (see the entire document, in particular, col. 3, lines 15-49) (note that Shields I and Shields II, like the instant application, teach causing a reaction (precipitation or "crashing") which prevents the colorant from migrating (or "bleeding") to an undesired area and thus, the colorant will remain in a desired area (at or near a surface of an object, so that the coloring is visible)) and such would have been obvious to one of ordinary skill in the art at the time the invention was made in the process of Jang et al in view of either Shields I or Shields II principally in order to manufacture an object having a desired color and/or a desired color pattern.

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### Response to Arguments

7. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo B.

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Tentoni whose telephone number is (571) 272-1209. The examiner can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER

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